

Figure 1

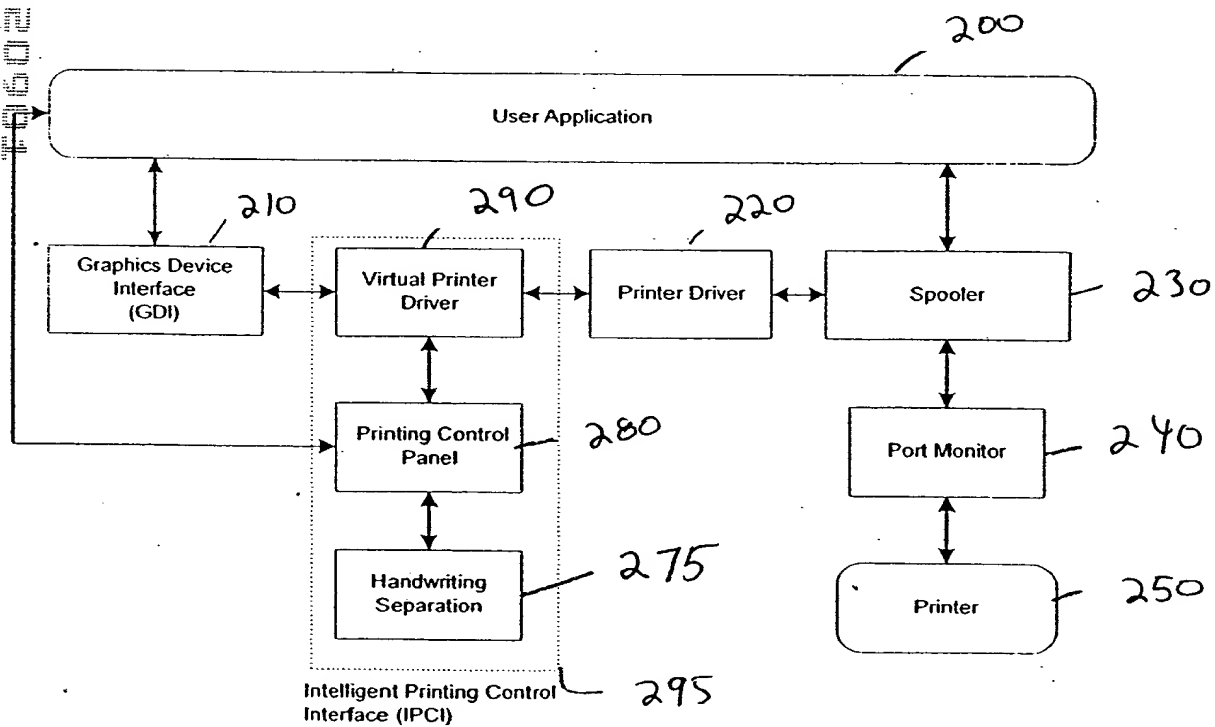


Figure 2

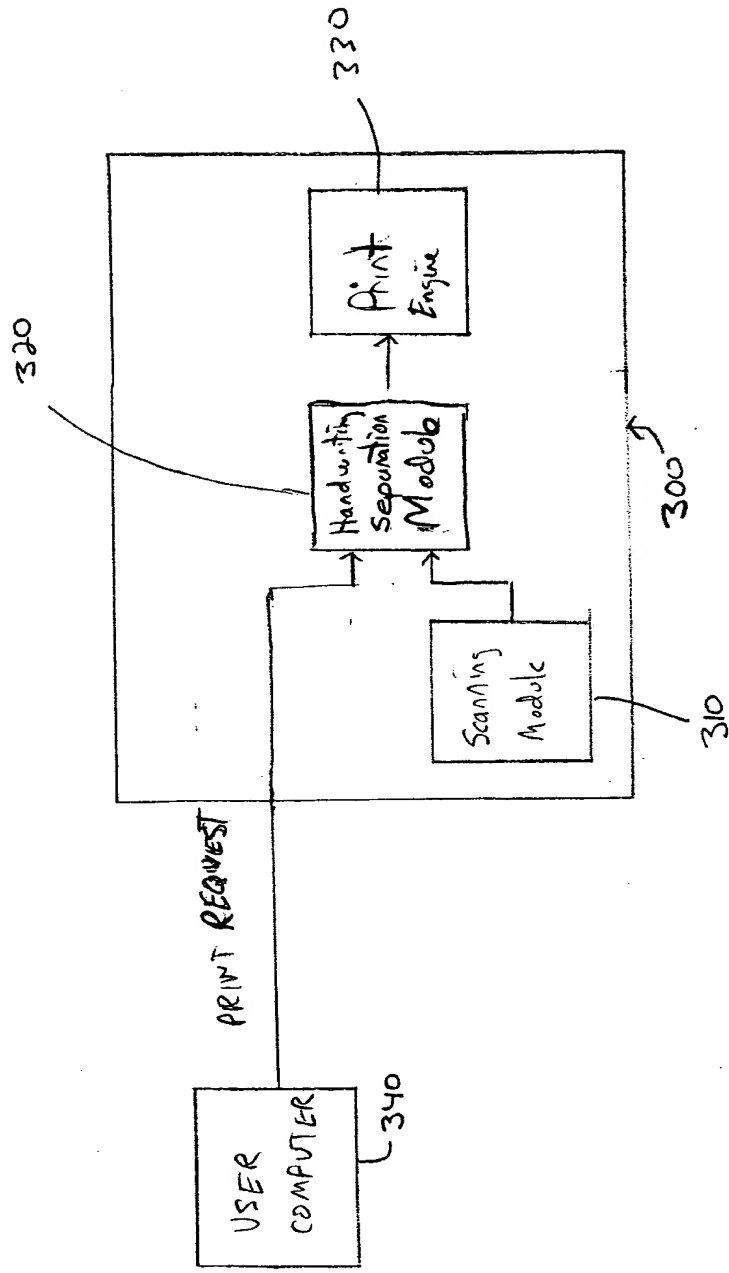


Figure 3

T06020" 625T8260

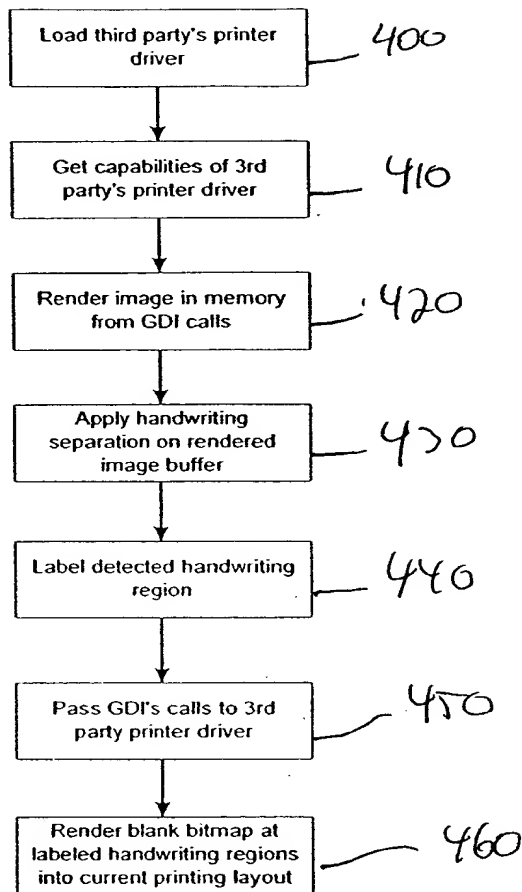


Figure 4

09781529.020901

M

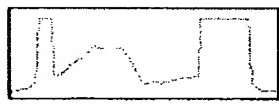


Fig 5A

m

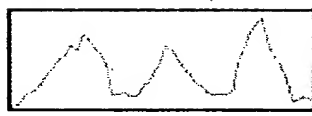


Fig. 5B

09781529 020901

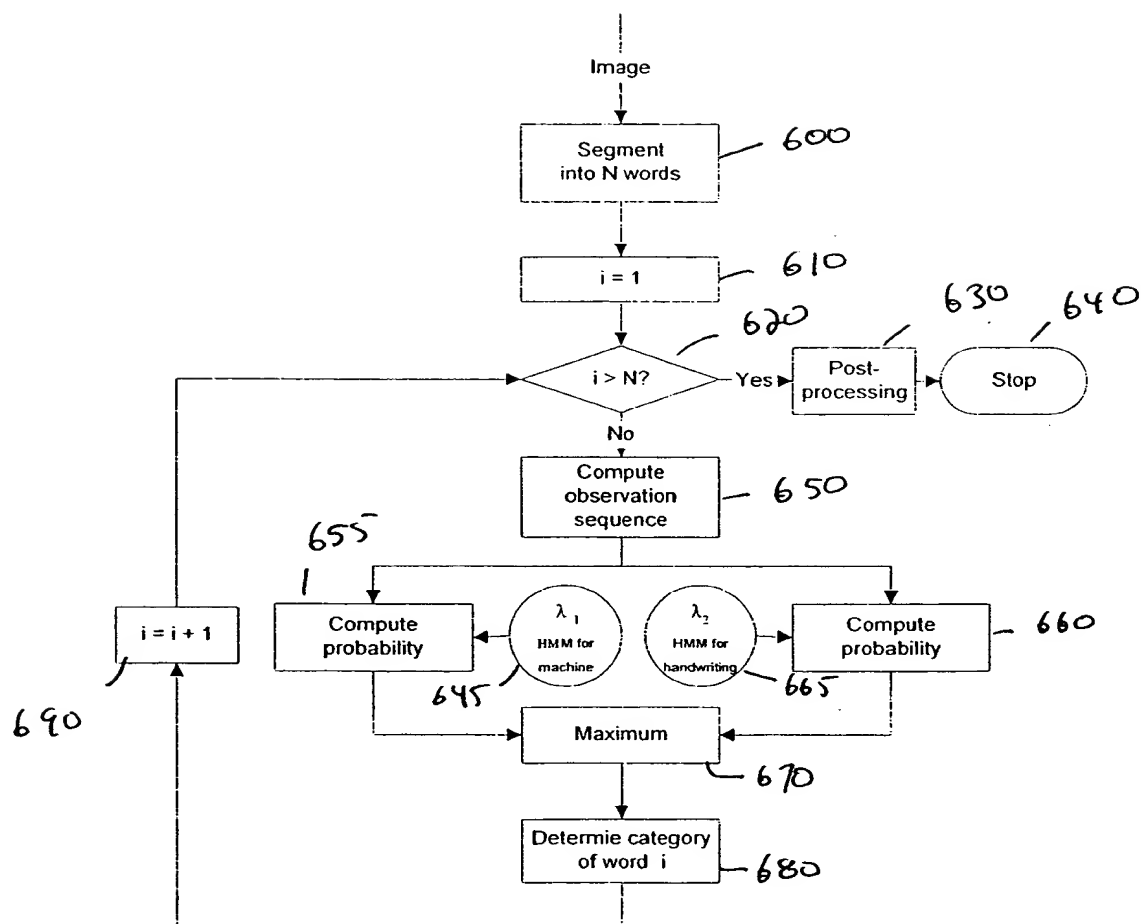


Fig. 6

[illegible]

700

Fig. 7

a	a	a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d	d	d
e	e	e	e	e	e	e	e	e	e
f	f	f	f	f	f	f	f	f	f
g	g	g	g	g	g	g	g	g	g
h	h	h	h	h	h	h	h	h	h
i	i	i	i	i	i	i	i	i	i
j	j	j	j	j	j	j	j	j	j
k	k	k	k	k	k	k	k	k	k
l	l	l	l	l	l	l	l	l	l
m	m	m	m	m	m	m	m	m	m

200

Fig. 8

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99

Figure 9



910

## Detecting and Utilizing Add-on Information From a Scanned Document Image

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PINTL-IM-142-099

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← register

### Abstract

A method for detecting and separating add-on handwritten annotations from a scanned document image is presented. This method combines the projection histogram and line merge techniques in order to discriminate between printed text lines and handwritten annotations. The example shows that it works with simple text documents with handwritten annotations on margin areas or white space within the main text. The algorithm, however, can be extended in order to handle more complex scenarios.

Please expand.

**Keywords:** Handwritten annotation detection, Handwritten annotation separation, Scanned image, Projection histogram, Connected component, Line merge.

Figure 10

106020" 62518/60

920

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925

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Please expand.

930

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Figure 11